Villagers' Economic Status in the Neighbourhood of A Thermal Power Project As Reflected By Their Assets – A Case Study of Kalisindh Thermal Power Project

Ms. Reeta Karra, Dr. P. N. Mishra, Dr. Pooja Jain

Assistant Engineer, Service Building, H-II, Second Floor, Kalisindh Thermal Power Project, Near village

Undal, Rajasthan Rajya Vidyut Utpadan Nigam Limited, Jhalawar - 326023 (Raj.) India

Email: reetakarra@yahoo.com

Professor & Director, Deen Dayal kaushal Kendra, Institute of Management Studies Building, Devi Ahilya

Vishwavidhyalay, Takshshila Campus, Khandwa Road, Indore - 452017 (M.P.) India

Email: professor_mishra@yahoo.com

Asst. Professor, International Institute of Professional Studies, Devi Ahilya Vishwavidhyalay, Takshshila

Campus, Khandwa Road, Indore - 452017 (M.P.) India

Email: poojaiips@gmail.com

Abstract

When any project commissioned, it always have an impact on social and economical well being on people living in vicinity. Same is true for Kalisindh Thermal Power Project, which is constructed near village Undal in State Rajasthan. For construction of this power project land of nearby villages viz Devri, Motipura, Nimoda, Singhania and Undal was acquired. Assets owned by residents of these villages are to be analyzed to know their economic well being. A survey has been carried out on people living in these villages through a structured questionnaire to collect data. All villagers belongs almost same background; hence convenience sampling considered appropriate for collection of data. Statistical tools used for the analysis are frequency, percentage, simple arithmetic mean and ANOVA. With help of this study, it has been concluded that economic well being of villagers is not good enough to afford such household assets like washing machine, refrigerator, microwave, air conditioner etc. They cannot afford a luxurious life style.

Keywords: ANOVA, Convenience Sampling, Household-Assets, Social Life.

1. Introduction

Household assets play a very important role in our life. It helps in performing household chores faster. It also supports a luxurious life. Household assets are also indicator of economic well being of individuals and hence influence our social life.

Many assets like washing machine, Geyser, Mixer/Grinder/Food processor, microwave etc. are helpful for minimizing time consumed in doing the work manually or without using the assets. Assets like four wheeler, air conditioner, refrigerator etc. are used for living a luxurious life.

Filmer and Pritchett (2001), noted that asset-based measures depict an individual or a household's long-run economic status and therefore do not necessarily account for short-term fluctuations in economic well-being or economic shocks. They estimated the relationship between household wealth and children's school enrolment

Córdova (2008), stated that The Latin American Public Opinion Project (LAPOP) research program relies heavily on basic measures of individual economic status. He focused in his study on measuring relative wealth using household indicators. For this he focused on a critical issue in the social sciences, namely how to obtain valid and reliable measures of personal economic wellbeing. His ultimate goal was to develop solid measures of individual economic status to assess the consequences of poverty and economic inequality for democratic political culture in Latin American and Caribbean countries.

Kalisindh thermal power plant is located near village Undal, in state Rajasthan. For construction of this power project land of five villages i.e. Devri, Motipura, Nimoda, Singhania and Undal were acquired, for which compensation was paid to villagers. A research on the socio-economic impact of Kalisindh thermal power project has been carrying out. As a part of this research, to know the economic well being of villagers, assets owned by villagers of these five villages has been analysed. This paper presents the findings.

2. Literature Review

Few reviews from available good deal of literature are presented here:-

Sivakumar (1978), discussed the possible future of different classes as indicated by their asset and indebtedness structures of the peasantry in Tamil Nadu.

Reardon et al. (1988), reported that transfers in the aftermath of the 1984 drought were only equivalent to three per cent of the losses for the poorest households in the Sahel. Recent events in East Asia during the recent crisis also exposed the limitations of informal insurance and self-insurance.

Morduch (1990), using the International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) sample, showed that asset-poor households devote a larger share of land to safer traditional varieties of rice and castor than to riskier but high-return varieties.

Davies (1996), used term 'coping strategies' to describe strategies employed during crises, where coping suggests success in dealing with the crisis, while 'adaption' is a characteristic of a 'vulnerable' household, using 'coping' strategies as part of standard behaviour. Adaptive strategies are then defined as a permanent change in the mix of ways in which households make a living, irrespective of the year in question.

Dercon (1996), found that households with limited liquid asset (livestock) grow proportionately more sweet potatoes, a low-return, low risk crop in an area in Tanzania. A household with an average livestock holding has a proportion of land allocated to sweet potatoes which is 20 per cent smaller than for a household with no liquid assets. The return per adult is 25 per cent higher for the crop portfolio of the wealthiest group compared to the poorest quintile. Choosing a less risky crop portfolio has substantial consequences for incomes.

Dercon (1998), looked further at the evidence on whether activity choice towards high return activities in rural Tanzania is affected by entry constraints or by comparative advantage, and found the former far more relevant. Risk considerations matter as well, but only forcing the poorer households to enter into low return activities. This leads us to the next point.

Rose (1999), found that in rural India negative rainfall shocks are associated with higher boy and girl mortality rates in landless households, but not in households with lots of land.

Dercon and Krishnan (2000b), tested risk-sharing within rural households in Ethiopia. Adult nutrition is used to investigate whether individuals are able to smooth their consumption and within the household over the seasons.

Thakur et.al (2000-2001), analyzed rural poverty and income distribution. Analysis was based on an intensive survey (1996-97) in eight villages representing all agro-ecological regions of Bihar. Their results indicated that income distribution was less unequal in technologically 'developed villages' than in 'less developed villages'. Agriculture and/or rice income was more equally distributed than non-agriculture income. Thus, the diffusion of modern agricultural technology did not affect the distribution of agriculture income but rather reduced inequality of overall income distribution. Further, rural poverty was lower in technologically 'developed villages'.

Dercon (2001b), reported that, in a sample of rural households, 10 years after the famine, cattle

holdings were still only two-thirds of what they were just before the famine of the mid-1980s.

Dercon (2002), stated that high income risk is part of life in developing countries. Climatic risks, economic fluctuations, but also a large number of individual-specific shocks make these households vulnerable to serious hardship. He focued on the opportunities available to households to use riskmanagement and risk-coping strategies, and on the constraints on their effectiveness, by reviewing some of the recent literature on savings as insurance, income diversification and smoothing, and informal risk-sharing arrangements.

Thomas et al. (2004), Frankenberg (1999), Chaudhuri et al. (2002), stated that in Indonesia, consumption poverty increased substantially, but even more important were the reductions in household investment in health and education, affecting future generations.

Liu et.al. (2010), considered in their paper the urban village as a community of interest for urbanized villagers, a migrant settlement with low-rent housing, and an urban self-organized grassroots unit, respectively related to the ambiguous property rights, an informal rental market, and the vacuum of state regulation. The urban village is therefore viewed as an unregulated asset despite its unruliness and disorder.

Guo (2011), examined whether assets provide a buffer for low-income households to food insecurity in the face of income losses. He found as a result of the Two-Part Model analyses that household assets have a significant association with food security in both the full sample and the low-income sample. In the presence of household assets, income's effect on food security decreases. In addition, the significant interaction terms of income loss and household assets indicate that assets provide resources to smooth food consumption.

3. Objective

This study is devoted to a single objective of analysing assets owned by villagers living in vicinity of Kalisindh Thermal Power Project.

4. Rationale

Kalisindh Thermal Power Project is located near village Undal, in state Rajasthan. Few more villages are also situated in neighbouring area of this Thermal Power Project. No study has been carried out to find out assets owned by villagers of these villages. This research is to know the economic well being of the villagers by analyzing assets owned by people living in villages located near to the Kalisindh Thermal Power Project. The researcher has gone through tremendous amount of literature available related to this field of study but very little research in this field is carried out till now. This study is an attempt to plug this gap.

5. Hypothesis

Hypothesis framed and tested in the study are mentioned as under:-

- H₀₁: "There is no significant difference among the villagers with respect to household assets owned by the villagers".
- H₀₂: "There is no significant difference among the villagers with respect to asset owned i.e. tape recorder".
- H₀₃: "There is no significant difference among the villagers with respect to asset owned i.e. CD player".
- H₀₄: "There is no significant difference among the villagers with respect to asset owned i.e. DVD player".
- H₀₅: "There is no significant difference among the villagers with respect to asset owned i.e. Two Wheeler".
- H₀₆: "There is no significant difference among the villagers with respect to asset owned i.e. Four Wheeler".
- H₀₇: "There is no significant difference among the villagers with respect to asset owned i.e. geyser".
- H₀₈: "There is no significant difference among the villagers with respect to asset owned i.e. mixer/grinder/food processor".
- H₀₉: "There is no significant difference among the villagers with respect to asset owned i.e. air cooler".
- H₁₀: "There is no significant difference among the villagers with respect to asset owned i.e. air conditioner".
- H₁₁: "There is no significant difference among the villagers with respect to asset owned i.e. washing machine".

- H₁₂: "There is no significant difference among the villagers with respect to asset owned i.e. refrigerator".
- H₁₃: "There is no significant difference among the villagers with respect to asset owned i.e. microwave".
- H₁₄: "There is no significant difference among the villagers with respect to asset owned i.e. computer/laptop".

6. Research Methodology

The type of research used here is descriptive in nature. A survey of people living in five villages i.e. Devri, Motipura, Nimoda, Singhania and Undal have been carried out by filling a structured questionnaire. All the villagers are almost on the same background; hence convenience sampling considered appropriate for selection of villagers for this particular study. Reliability analysis was done to identify internal consistency of the variables. Table – 1 shows Cronbach's alpha value of the scale, which is greater than 0.7. This shows adequate internal consistency. Statistical tools used for the analysis are frequency, percentage, simple arithmetic mean and ANOVA.

7. Data Analysis and Findings

Data Analysis has giving the following results:-

7.1 Household assets owned by the villagers

Table -2 show that most of people in all five villages own Two Wheeler while very few people own Four Wheeler in these villages. Many people of village Motipura and Singhania own assets like Mixer/Grinder/Food Processor. Air Cooler and Refrigerator at their home while only very few people of villages Devri, Nimaoda and Undal own such type of assets at their home. It infers that many residents of village Motipura and Singhania are aware about utility of such house hold assets; also their economical well being is good enough to afford such assets. Very few people of village Singhania and Undal own assets like Geyser, Washing machine and computer / Laptop at their home. It infers that very few residents of these villages can afford such expensive assets. No one in all five villages owns assets like CD player, Air Conditioner and microwave at their home. Still residents of villages are not having a very good economic condition to afford assets required for living a luxurious life.

8. Interpretation of ANOVA

Interpretation of the ANOVA table is described as below:-

8.1.Household Assets owned by the villagers

Table – 3 shows that f value of interaction between the villages and household assets owned by the villagers is 4.188 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to household assets owned by the villagers. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to household assets owned by the villagers" is rejected.

Further observations from table -4 are as follows:

- i) Significant difference is found between the villagers of village Devri and Undal at 0.05 level. Mean score of village Undal is higher than that of Devri, so it can be concluded that more residents in village Devri own household assets.
- ii) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more residents in village Motipura own household assets.
- iii) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more residents in village Motipura own household assets.
- iv) Significant difference is found between the villagers of village Nimoda and Singhania at 0.05 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more residents in village Singhania own household assets.
- v) Significant difference is found between the villagers of village Singhania and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhania, so it can be concluded that more residents in village Singhania own household assets.

8.2.Asset owned i.e. Tape recorder

Table – 3 shows that f value of interaction between the village and asset owned i.e. tape recorder is 0.659 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to asset owned i.e. tape recorder. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. tape recorder" is not rejected.

8.3. Asset owned i.e. CD Player

Table – 3 shows that f value of interaction between the village and asset owned i.e. CD player is negligible, hence insignificant. It means that there is no significant difference in the villagers with respect to asset owned i.e. CD player. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. CD player" is not rejected.

8.4.Asset owned i.e. DVD Player

Table – 3 shows that f value of interaction between the village and asset owned i.e. DVD player is 1.097 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to asset owned i.e. DVD player. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. DVD player" is not rejected.

8.5.Asset owned i.e. Two Wheeler

Table – 3 shows that f value of interaction between the villages and asset owned i.e. Two Wheeler is 3.035 with degree of freedom 4, which is significant at the 0.05 level. It means that there is significant difference in the villagers with respect to asset owned i.e. Two Wheeler. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. Two Wheeler" is rejected.

Further observations from table -4 are as follows:

 Significant difference is found between the villagers of village Motipura and Nimoda at 0.05 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more residents in village Motipura own Two Wheeler.

- ii) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more residents in village Motipura own Two Wheeler.
- iii) Significant difference is found between the villagers of village Singhania and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhania, so it can be concluded that more residents in village Singhania own Two Wheeler.

8.6. Asset owned i.e. Four Wheeler

Table – 3 shows that f value of interaction between the village and asset owned i.e. Four Wheeler is 0.800 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to asset owned i.e. Four Wheeler. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. Four Wheeler" is not rejected.

8.7.Asset owned i.e. Geyser

Table – 3 shows that f value of interaction between the village and asset owned i.e. geyser is 1.305 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to asset owned i.e. geyser. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. geyser" is not rejected.

8.8. Asset owned i.e. Mixer/Grinder/Food Processor

Table – 3 shows that f value of interaction between the villages and asset owned i.e. mixer/grinder/food processor is 9.320 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to asset owned i.e. mixer/grinder/food processor. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. mixer/grinder/food processor" is rejected.

Further observations from table – 4 are as follows:

- i) Significant difference is found between the villagers of village Devri and Motipura at 0.01 level. Mean score of village Devri is higher than that of Motipura, so it can be concluded that more residents in village Motipura own mixer/grinder/food processor.
- ii) Significant difference is found between the villagers of village Devri and Singhania at 0.01 level. Mean score of village Devri is higher than that of Singhania, so it can be concluded that more residents in village Singhania own mixer/grinder/food processor.
- iii) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more residents in village Motipura own mixer/grinder/food processor.
- iv) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more residents in village Motipura own mixer/grinder/food processor.
- v) Significant difference is found between the villagers of village Nimoda and Singhania at 0.01 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more residents in village Singhania own mixer/grinder/food processor.
- vi) Significant difference is found between the villagers of village Singhania and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhania, so it can be concluded that more residents in village Singhania own mixer/grinder/food processor.

8.9. Asset owned i.e. Air Cooler

Table -3 shows that f value of interaction between the villages and asset owned i.e. air cooler is 6.626 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to asset owned i.e. air cooler. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. air cooler" is rejected.

Further observations from table -4 are as follows:

- i) Significant difference is found between the villagers of village Devri and Motipura at 0.01 level. Mean score of village Devri is higher than that of Motipura, so it can be concluded that more residents in village Motipura own air cooler.
- ii) Significant difference is found between the villagers of village Devri and Singhania at 0.05 level. Mean score of village Devri is higher than that of Singhania, so it can be concluded that more residents in village Singhania own air cooler.
- iii) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more residents in village Motipura own air cooler.
- iv) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more residents in village Motipura own air cooler.
- v) Significant difference is found between the villagers of village Nimoda and Singhania at 0.01 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more residents in village Singhania own air cooler.

8.10. Asset owned i.e. Air Conditioner

Table – 3 shows that f value of interaction between the village and asset owned i.e. Air Conditioner is negligible, hence insignificant. It means that there is no significant difference in the villagers with respect to asset owned i.e. Air Conditioner. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. Air Conditioner" is not rejected.

8.11. Asset owned i.e. Washing Machine

Table -3 shows that f value of interaction between the villages and asset owned i.e. washing machine is 30162 with degree of freedom 4, which is significant at the 0.05 level. It means that there is significant difference in the villagers with respect to asset owned i.e. washing machine. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. washing machine" is rejected.

Further observations from table -4 are as follows:

- i) Significant difference is found between the villagers of village Devri and Singhania at 0.01 level. Mean score of village Devri is higher than that of Singhania, so it can be concluded that more residents in village Singhania own washing machine.
- ii) Significant difference is found between the villagers of village Motipura and Singhania at 0.01 level. Mean score of village Motipura is higher than that of Singhania, so it can be concluded that more residents in village Singhania own washing machine.
- iii) Significant difference is found between the villagers of village Nimoda and Singhania at 0.01 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more residents in village Singhania own washing machine.
- iv) Significant difference is found between the villagers of village Singhania and Undal at 0.05 level. Mean score of village Undal is higher than that of Singhania, so it can be concluded that more residents in village Singhania own washing machine.

8.12. Asset owned i.e. Refrigerator

Table – 3 shows that f value of interaction between the villages and asset owned i.e. refrigerator is 11.899 with degree of freedom 4, which is significant at the 0.01 level. It means that there is significant difference in the villagers with respect to asset owned i.e. refrigerator. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. refrigerator" is rejected.

Further observations from table -4 are as follows:

i) Significant difference is found between the villagers of village Devri and Motipura at 0.01 level. Mean score of village Devri is

higher than that of Motipura, so it can be concluded that more residents in village Motipura own refrigerator.

- ii) Significant difference is found between the villagers of village Devri and Singhania at 0.01 level. Mean score of village Devri is higher than that of Singhania, so it can be concluded that more villagers in village Singhania own refrigerator.
- iii) Significant difference is found between the villagers of village Motipura and Nimoda at 0.01 level. Mean score of village Nimoda is higher than that of Motipura, so it can be concluded that more residents in village Motipura own refrigerator.
- iv) Significant difference is found between the villagers of village Motipura and Singhania at 0.05 level. Mean score of village Singhania is higher than that of Motipura, so it can be concluded that more residents in village Motipura own refrigerator.
- v) Significant difference is found between the villagers of village Motipura and Undal at 0.01 level. Mean score of village Undal is higher than that of Motipura, so it can be concluded that more residents in village Motipura own refrigerator.
- vi) Significant difference is found between the villagers of village Nimoda and Singhania at 0.01 level. Mean score of village Nimoda is higher than that of Singhania, so it can be concluded that more residents in village Singhania own refrigerator.
- vii) Significant difference is found between the villagers of village Singhania and Undal at 0.01 level. Mean score of village Undal is higher than that of Singhania, so it can be concluded that more residents in village Singhania own refrigerator.

8.13. Asset owned i.e. Microwave

Table – 3 shows that f value of interaction between the village and asset owned i.e. Microwave is negligible, hence insignificant. It means that there is no significant difference in the villagers with respect to asset owned i.e. Microwave. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. Microwave" is not rejected.

8.14. Asset owned i.e. Computer/Laptop

Table – 3 shows that f value of interaction between the village and asset owned i.e. computer/laptop is 0.962 with degree of freedom 4, which is not significant. It means that there is no significant difference in the villagers with respect to asset owned i.e. computer/laptop. In the light of this the null hypothesis namely "There is no significant difference among the villagers with respect to asset owned i.e. computer/laptop" is not rejected.

9. Conclusion and Suggestions

Only few villagers of village Motipura and Singhania and very few villagers of village Devri, Nimoda and Undal own only few household assets to fulfil their daily requirement. It shows their economic well being is still not in position to afford such household assets and lives a luxurious life. Also people living in these villages are not much aware about utility of such household assets, hence working in a conventional manner.

NGOs working for social development of people as well as agencies working for rural development shall workout the situation and propose some plans for improving their economic status and elevate their living standard.

10. Limitations of the Study

The study has following major limitations:-

- The study is limited to the people living in villages located near to the Kalisindh Thermal Power Plant only; therefore findings may not be considered valid for other areas. However, it may indicate some common points about economic well being of villagers.
- Non probabilistic Convenience sampling has been used for collecting primary data from villagers for the study and it has its own limitations.
- Results cannot be generalized.

References

1. Chaudhuri Shubham, Jalan Jyotsna and Suryahadi Asep, "Assessing Household Vulnerability to Poverty from Crosssectional Data: A Methodology and Estimates from Indonesia", Columbia University, New York, Discussion Paper, April 2002, Vol. 102, pg. 52.

- 2. Córdova Abby, "Methodological Note: Measuring Relative Wealth using Household Asset Indicators", Latin American Public Opinion Project, 2009, "Insights" series No. 10806, Americas Barometer Insights, 2008, No.6, pg 1-9.
- 3. Davies, Susanna, "Adaptable livelihoods: coping with food insecurity in the Malian Sahel", *Macmillan Press Ltd., London,* 1996.
- 4. Dercon S., "Risk, Crop Choice and Savings: Evidence from Tanzania", Economic Development and Cultural Change, 1996, Vol.44, No.3, pg. 385–514.
- 5. Dercon, S., "Wealth, Risk and Activity Choice: Cattle in Western Tanzania", Journal of Development Economics, 1998, Vol.55, No.1, pg. 1–42.
- 6. Dercon, S. and P. Krishnan, "In Sickness and in Health: Risk-Sharing within Households in Ethiopia", *Journal of Political Economy, Aug. 2000b, Vol.108, No.4, pg.* 688–727.
- 7. Dercon, S., "Economic Reform, Growth and the Poor: Evidence from Panel Data in Rural Ethiopia", Oxford University, Centre for the Study of African Economies Working Paper, 2001b, WPS/2001.8.
- 8. Dercon Stefan, "Income Risk, Coping Strategies and Safety Nets", Oxford Journals Social Sciences World Bank Research Observer, Feb.2002, Vol. 17, Issue 2, Pg. 141-166.
- 9. Filmer Deon and Pritchett Lant H., "Estimating Wealth Effect without Expenditure Data or Tears: An Application to Educational Enrolments in States of India." *Demography, 2001, Vol.* 38, *No. 1, pg 115-132.*
- 10. Frankenberg Elizabeth, Thomas Duncan, Beegle Kathleen, "The Real Costs of Indonesia's Economic Crisis: Preliminary Findings from the Indonesia Family Life Surveys", *Santa Monica: RAND*, 1999, pg. 99-104.

- 11. Guo Baorong, "Household Assets and Food Security: Evidence from Survey of Program Dynamics", Journal of Family and Economic issues, March 2011, Vol. 32, Issue 1, pg. 98-110.
- 12. Liu Yuting, He Shenjing, Wu Fulong, Webster Chris, "Urban villages under China's rapid urbanization: Unregulated assets and transitional neighbourhoods', *Habitat International, April 2010, Vol. 34, Issue 2, pg. 135-144.*
- 13. Morduch Jonathan, "Risk, Production and Saving: Theory and Evidence from Indian Households", *Harvard University*, *Manuscript*, 1990.
- Reardon T., C. Delgado and P. Matlon, "Coping with Household-Level Food Insecurity Drought-Affected Areas of Burkina Faso", World Development, 1988, Vol.16, No.9, 1, pg. 148–70.

- 15. Rose, E., "Consumption Smoothing and Excess Female Mortality in Rural India", *Review of Economics and Statistics, Feb.* 1999, Vol.81, No.1, pg. 41–49.
- 16. Sivakumar S.S., "Aspects of Agrarian Economy in Tamil Nadu: A Study of Two Villages: III: Structure of Assets and Indebtedness", Economic and Political Weekly, May 1978, Vol. 13, No. 20, pp. 846-851.
- Thakur Jawahar, Bose Manik L., Hossain Mahabub, Janaiah A., "Rural Income Distribution and Poverty in Bihar: Insights from Village Studies", *Economic and Political Weekly, Dec. 2000-Jan.2001, Vol. 35, No. 52/53, pg. 4657-4663.*
- Thomas D., Beegle K., Frankenberg E., Sikoki B., Strauss J. and Teruel G., "Education in a Crisis", *Journal of Development Economics*, 2004, Vol. 74, *Issue* 1, pg. 53-85.

Appendix

Name of Village	Cronbach Alpha
Devri	0.735
Motipura	0.771
Nimoda	0.724
Singhania	0.757
Undal	0.809

Table – 1: Reliability Statistics

Table – 2: Assets Owned

Table 2A:Village Devri

Assets	Yes (%)	No (%)
Household Assets owned by villagers	68	32
Asset i.e. Tape Recorder	2	98
Asset i.e. CD Player	0	100
Asset i.e. DVD Player	0	100
Asset i.e. Two Wheeler	60	40
Asset i.e. Four Wheeler	4	96
Asset i.e. Geyser	0	100
Asset i.e. Mixer / Grinder/ Food Processor	6	94
Asset i.e. Air Cooler	20	80
Asset i.e. Air conditioner	0	100
Asset i.e. Washing Machine	0	100

Asset i.e. Refrigerator	8	92
Asset i.e. Microwave	0	100
Asset i.e. Computer / Laptop	2	98

Table 2B:Village Motipura

Assets	Yes (%)	No (%)
Household Assets owned by villagers	77	23
Asset i.e. Tape Recorder	0	100
Asset i.e. CD Player	0	100
Asset i.e. DVD Player	2	98
Asset i.e. Two Wheeler	75	25
Asset i.e. Four Wheeler	6	94
Asset i.e. Geyser	0	100
Asset i.e. Mixer / Grinder/ Food Processor	40	60
Asset i.e. Air Cooler	53	47
Asset i.e. Air conditioner	0	100
Asset i.e. Washing Machine	0	100
Asset i.e. Refrigerator	49	51
Asset i.e. Microwave	0	100
Asset i.e. Computer / Laptop	2	98

Table 2C:Village Nimoda

Assets	Yes (%)	No (%)
Household Assets owned by villagers	52	48
Asset i.e. Tape Recorder	0	100
Asset i.e. CD Player	0	100
Asset i.e. DVD Player	0	100
Asset i.e. Two Wheeler	52	48
Asset i.e. Four Wheeler	2	98
Asset i.e. Geyser	0	100
Asset i.e. Mixer / Grinder/ Food Processor	6	94
Asset i.e. Air Cooler	11	89
Asset i.e. Air conditioner	0	100
Asset i.e. Washing Machine	0	100
Asset i.e. Refrigerator	4	96
Asset i.e. Microwave	0	100
Asset i.e. Computer / Laptop	0	100

Table 2D: Village Singhania

Assets	Yes (%)	No (%)
Household Assets owned by villagers	74	26
Asset i.e. Tape Recorder	0	100
Asset i.e. CD Player	0	100
Asset i.e. DVD Player	0	100
Asset i.e. Two Wheeler	70	30
Asset i.e. Four Wheeler	10	90
Asset i.e. Geyser	4	96

Asset i.e. Mixer / Grinder/ Food Processor	34	66
Asset i.e. Air Cooler	38	62
Asset i.e. Air conditioner	0	100
Asset i.e. Washing Machine	8	92
Asset i.e. Refrigerator	32	68
Asset i.e. Microwave	0	100
Asset i.e. Computer / Laptop	6	94

Table 2E:Village Undal

Assets	Yes (%)	No (%)
Household Assets owned by villagers	47	53
Asset i.e. Tape Recorder	2	98
Asset i.e. CD Player	0	100
Asset i.e. DVD Player	0	100
Asset i.e. Two Wheeler	47	53
Asset i.e. Four Wheeler	5	95
Asset i.e. Geyser	2	98
Asset i.e. Mixer / Grinder/ Food Processor	12	88
Asset i.e. Air Cooler	27	73
Asset i.e. Air conditioner	0	100
Asset i.e. Washing Machine	2	98
Asset i.e. Refrigerator	13	87
Asset i.e. Microwave	0	100
Asset i.e. Computer / Laptop	5	95

Table – 3: ANOVA

[Sum of	Df	Mean	F	Sig.
			Squares		Square		
1.	Household Assets	Between Groups	3.738	4	.934	4.188	.003
1.	owned by villagers	Within Groups	55.337	248	.223		
	owned by vinagers	Total	59.075	252			
2.	Asset owned i.e.	Between Groups	.021	4	.005	.659	.621
۷.	Tape Recorder	Within Groups	1.963	248	.008		
	Tape Recorder	Total	1.984	252			
3.	Asset owned i.e. CD	Between Groups	.000	4	.000	•	
5.		Within Groups	.000	248	.000		
	Player	Total	.000	252			
4.	Asset owned i.e.	Between Groups	.017	4	.004	1.097	.358
4.	DVD Player	Within Groups	.979	248	.004		
	DVDTayer	Total	.996	252			
5.	Asset owned i.e.	Between Groups	2.832	4	.708	3.035	.018
5.	Two Wheeler	Within Groups	57.848	248	.233		
		Total	60.680	252			
6.	Asset owned i.e.	Between Groups	.169	4	.042	.800	.526
	Four Wheeler	Within Groups	13.057	248	.053		
	(Car/Jeep)	Total	13.225	252			
7.	Asset owned i.e.	Between Groups	.061	4	.015	1.305	.269
	Geyser	Within Groups	2.903	248	.012		

	Total	2.964	252			I
8. Asset owned i.e.	Between Groups	5.163	4	1.291	9.320	.000
Mixer/Grinder/Food	Within Groups	34.347	248	.138		
Processor	Total	39.510	252			
9. Asset owned i.e. Air	Between Groups	5.095	4	1.274	6.626	.000
2. Asset owned i.e. All Cooler	Within Groups	47.672	248	.192		
Coolei	Total	52.767	252			
10. Asset owned i.e. Air	Between Groups	.000	4	.000	•	
Conditioner	Within Groups	.000	248	.000		
Conditioner	Total	.000	252			
11. Asset owned i.e.	Between Groups	.238	4	.059	3.162	.015
Washing Machine	Within Groups	4.663	248	.019		
w ashing wachine	Total	4.901	252			
12. Asset owned i.e.	Between Groups	6.746	4	1.687	11.899	.000
	Within Groups	35.151	248	.142		
Refrigerator	Total	41.897	252			
13. Asset owned i.e.	Between Groups	.000	4	.000	•	
Microwave	Within Groups	.000	248	.000		
Microwave	Total	.000	252			
	Between Groups	.118	4	.030	.962	.429
14. Asset owned i.e. Computer/Laptop	Within Groups	7.629	248	.031		
Computer/Laptop	Total	7.747	252			

Table – 4: Post Hoc TestMultiple Comparisons

Multiple Comparisons							
LSD	-	_					
Dependent Variable	(I) Village (J) Name Village		Mean Std. Differenc Error		Sig.	95% Confidence Interval	
		Name	e (I-J)			Lower Bound	Upper Bound
	-	Motipura	.08596	.09597	.371	1031	.2750
	Devri	Nimoda Singhania Undal	15826 .06000 21333 [*]	.09651 .09447 .09045	.102 .526 .019	3483 1261 3915	.0318 .2461 0352
	Motipura	Devri Nimoda Singhania Undal	08596 24422 [*] 02596 29929 [*]	.09597 .09797 .09597 .09201	.371 .013 .787 .001	2750 4372 2150 4805	.1031 0513 .1631 1181
1. Household Assets owned by villagers	Nimoda	Devri Motipura Singhania Undal	.15826 .24422 [*] .21826 [*] 05507	.09651 .09797 .09651 .09257	.102 .013 .025 .552	0318 .0513 .0282 2374	.3483 .4372 .4083 .1273
	Singhania	Devri Motipura Nimoda Undal	06000 .02596 21826 [*] 27333 [*]	.09447 .09597 .09651 .09045	.526 .787 .025 .003	2461 1631 4083 4515	.1261 .2150 0282 0952
	Undal	Devri Motipura Nimoda	.21333 [*] .29929 [*] .05507	.09045 .09201 .09257	.019 .001 .552	.0352 .1181 1273	.3915 .4805 .2374

I			Singhania	.27333*	.09045	.003	.0952	.4515
		Devri	Motipura Nimoda Singhania Undal	.14468 07826 .10000 13333	.09812 .09867 .09659 .09248	.142 .428 .302 .151	0486 2726 0902 3155	.3379 .1161 .2902 .0488
		Motipura	Devri Nimoda Singhania Undal	14468 22294 [*] 04468 27801 [*]	.09812 .10017 .09812 .09408	.142 .027 .649 .003	3379 4202 2379 4633	.0486 0257 .1486 0927
2.	Asset owned i.e. Two Wheeler	Nimoda	Devri Motipura Singhania Undal	.07826 .22294 [*] .17826 05507	.09867 .10017 .09867 .09465	.428 .027 .072 .561	1161 .0257 0161 2415	.2726 .4202 .3726 .1313
		Singhania	Devri Motipura Nimoda Undal	10000 .04468 17826 23333 [*]	.09659 .09812 .09867 .09248	.302 .649 .072 .012	2902 1486 3726 4155	.0902 .2379 .0161 0512
		Undal	Devri Motipura Nimoda Singhania	.13333 .27801* .05507 .23333*	.09248 .09408 .09465 .09248	.151 .003 .561 .012	0488 .0927 1313 .0512	.3155 .4633 .2415 .4155
		Devri	Motipura Nimoda Singhania Undal	.34426 [*] .00522 .28000 [*] .05667	.07561 .07603 .07443 .07126	.000 .945 .000 .427	.1953 1445 .1334 0837	.4932 .1550 .4266 .1970
		Motipura	Devri Nimoda Singhania Undal	34426 [*] 33904 [*] 06426 28759 [*]	.07561 .07718 .07561 .07249	.000 .000 .396 .000	4932 4911 2132 4304	1953 1870 .0847 1448
3.	Asset owned i.e. Mixer/Grinder/Foo d Processor	Nimoda	Devri Motipura Singhania Undal	00522 .33904 [*] .27478 [*] .05145	.07603 .07718 .07603 .07293	.945 .000 .000 .481	1550 .1870 .1250 0922	.1445 .4911 .4245 .1951
		Singhania	Devri Motipura Nimoda Undal	28000 [*] .06426 27478 [*] 22333 [*]	.07443 .07561 .07603 .07126	.000 .396 .000 .002	4266 0847 4245 3637	1334 .2132 1250 0830
		Undal	Devri Motipura Nimoda Singhania	05667 .28759 [*] 05145 .22333 [*]	.07126 .07249 .07293 .07126	.427 .000 .481 .002	1970 .1448 1951 .0830	.0837 .4304 .0922 .3637
4.	Asset owned i.e. Air Cooler	Devri	Motipura Nimoda Singhania Undal	.33191 [*] 09130 .18000 [*] .06667	.08908 .08957 .08769 .08395	.000 .309 .041 .428	.1565 2677 .0073 0987	.5074 .0851 .3527 .2320
		Motipura	Devri	33191 [*]	.08908	.000	5074	1565

			Nimoda Singhania Undal	42322 [*] 15191 26525 [*]	.09093 .08908 .08540	.000 .089 .002	6023 3274 4335	2441 .0235 0970
		Nimoda	Devri Motipura Singhania Undal	.09130 .42322 [*] .27130 [*] .15797	.08957 .09093 .08957 .08592	.309 .000 .003 .067	0851 .2441 .0949 0113	.2677 .6023 .4477 .3272
		Singhania	Devri Motipura Nimoda Undal	18000 [*] .15191 27130 [*] 11333	.08769 .08908 .08957 .08395	.041 .089 .003 .178	3527 0235 4477 2787	0073 .3274 0949 .0520
		Undal	Devri Motipura Nimoda Singhania	06667 .26525* 15797 .11333	.08395 .08540 .08592 .08395	.428 .002 .067 .178	2320 .0970 3272 0520	.0987 .4335 .0113 .2787
		Devri	Motipura Nimoda Singhania Undal	.00000 .00000 $.08000^{*}$.01667	.02786 .02802 .02743 .02626	1.000 1.000 .004 .526	0549 0552 .0260 0351	.0549 .0552 .1340 .0684
		Motipura	Devri Nimoda Singhania Undal	.00000 .00000 $.08000^{*}$.01667	.02786 .02844 .02786 .02671	1.000 1.000 .004 .533	0549 0560 .0251 0359	.0549 .0560 .1349 .0693
5.	Asset owned i.e. Washing Machine	Nimoda	Devri Motipura Singhania Undal	.00000 .00000 $.08000^{*}$.01667	.02802 .02844 .02802 .02687	1.000 1.000 .005 .536	0552 0560 .0248 0363	.0552 .0560 .1352 .0696
		Singhania	Devri Motipura Nimoda Undal	08000* 08000* 08000* 06333*	.02743 .02786 .02802 .02626	.004 .004 .005 .017	1340 1349 1352 1151	0260 0251 0248 0116
		Undal	Devri Motipura Nimoda Singhania	01667 01667 01667 .06333*	.02626 .02671 .02687 .02626	.526 .533 .536 .017	0684 0693 0696 .0116	.0351 .0359 .0363 .1151
		Devri	Motipura Nimoda Singhania Undal	.40936 [*] 03652 .24000 [*] .05333	.07649 .07692 .07530 .07209	.000 .635 .002 .460	.2587 1880 .0917 0887	.5600 .1150 .3883 .1953
6.	Asset owned i.e. Refrigerator	Motipura	Devri Nimoda Singhania Undal	40936 [*] 44588 [*] 16936 [*] 35603 [*]	.07649 .07808 .07649 .07333	.000 .000 .028 .000	5600 5997 3200 5005	2587 2921 0187 2116
		Nimoda	Devri Motipura Singhania	.03652 .44588 [*] .27652 [*]	.07692 .07808 .07692	.635 .000 .000	1150 .2921 .1250	.1880 .5997 .4280

Undal	.08986	.07378	.224	0555	.2352
Devri Singhania Nimoo Undal	da 27652^*_{*}	.07530 .07649 .07692 .07209	.002 .028 .000 .010	3883 .0187 4280 3287	0917 .3200 1250 0447
Devri Undal Nimoo Singh	ura .35603 [*] da08986	.07333	.460 .000 .224 .010	1953 .2116 2352 .0447	.0887 .5005 .0555 .3287

*. The mean difference is significant at the 0.05 level.